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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,695	12/28/2001	John Wallace Macpherson	VANS118245	8588

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EXAMINER

HRUSKOCI, PETER A

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 09/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/033,695

Applicant(s)

MACPHERSON ET AL.

Examiner

Peter A. Hruskoci

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1-30, 2-11, 3-29, and 9-16-02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-79 is/are pending in the application.
- 4a) Of the above claim(s) 38-79 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-79 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4-6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-37, drawn to a device, classified in class 210, subclass 198.1.
- II. Claims 38-79, drawn to a method, classified in class 210, subclass 728.

The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the device as claimed can be used in a materially different method such as a hydrocarbon recovery method.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and recognized divergent subject matter, restriction for examination purposes as indicated is proper.

During a telephone conversation with Barry F. McGurl on 8-28-03 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-37. Affirmation of this election must be made by applicant in replying to this Office action. Claims 38-79 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the

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application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The disclosure is objected to because of the following informalities: In the specification on page 5 line 1 "conduit 36" does not appear to be labeled in Fig. 3.

Appropriate correction is required.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 12-16, and 28-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roy. Roy disclose (see col. 3 line 51 through col. 8 line 40) the structure of the purification device substantially as claimed. The claims differ from Roy by reciting that the pores have a specific average diameter. It is submitted that the diameter of the pores in the nylon or cotton mesh utilized in Roy, is considered patentably indistinguishable from the recited diameter. It would have been obvious to one skilled in the art to modify the device of Roy by utilizing the recited diameter, to aid in controlling the dose rate of flocculant into the water. The specific average diameter utilized would have been an obvious matter of engineering design to one skilled in the art, depending on the specific water treated and results desired, absent a sufficient showing of unexpected results.

Claims 8-11 and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roy as above, and further in view of Andrus. The claims differ from Roy as applied above by

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reciting that the body is segmented, and comprises anionic flocculant disposed in the first half of the body and cationic flocculant disposed in a second half of the body. Andrus disclose (see page 2 col. 1 line 50 through col. 2 line 26) that it is known in the art to utilize an apparatus containing a segmented body or a plurality of bags of coagulum forming chemicals to aid in purifying water. It would have been obvious to one skilled in the art to modify the device of Roy by included the recited segmented body and flocculants disposed in the first and second halves in view of the teachings of Andrus, to aid in purifying the water. The specific flocculant disposed in the first and second halves, would have been an obvious matter of engineering design to one skilled in the art, depending on the specific water treated and results desired, absent a sufficient showing of unexpected results.

Claims 17-20, 24, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roy as above, and further in view of Hashimoto et al.. The claims differ from Roy as applied above by reciting that the cationic flocculant is a chitosan salt, cationic gum, or cationic starch. Hashimoto et al. disclose (see col. 3 line 7 through col. 4 line 57) that it is known in the art to utilize the recited cationic flocculants to aid in flocculating and dewatering sludge. It would have been obvious to one skilled in the art to modify the device of Roy by including the recited cationic flocculants in view of the teachings of Hashimoto et al., to aid in flocculating and dewatering sludge contaminants in the water. The specific molecular weight of the chitosan salt would have been an obvious matter of engineering design to one skilled in the art, depending on the specific water treated and results desired, absent a sufficient showing of unexpected results.

Claims 21-23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roy in view of Hashimoto et al. as above, and further in view of Deans et al.. The claims differ from

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the references as applied above by reciting that the chitosan salt has a specific percentage of deacetylation, and is a cationic N-halochitosan. Deans et al. disclose (see col. 3 line 3 through col. 4 line 63) that it is known in the art to utilize deacetylated or partially deacetylated chitosan, and N-halochitosan to aid in flocculating and precipitating metals in water. It would have been obvious to one skilled in the art to modify the references as applied above by including the recited deacetylated chitosan salt and N-halochitosan in view of the teachings of Deans et al., to aid in flocculating and dewatering sludge contaminants in the water. The specific percentage of deacetylation of the chitosan salt utilized would have been an obvious matter of engineering design to one skilled in the art, depending on the specific water treated and results desired, absent a sufficient showing of unexpected results.

Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roy in view of Hashimoto et al. and Deans et al. as above, and further in view of Andrus. The claim differs from the references as applied above by reciting that the body is segmented. Andrus disclose (see page 2 col. 1 line 50 through col. 2 line 26) that it is known in the art to utilize an apparatus containing a segmented body or a plurality of bags of coagulum forming chemicals to aid in purifying water. It would have been obvious to one skilled in the art to modify the device of Roy by included the recited segmented body in view of the teachings of Andrus, to aid in purifying the water.


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter A. Hruskoci whose telephone number is 703-308-3839. The examiner can normally be reached on Monday through Friday from 6:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on 703-308-1261. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Peter A. Hruskoci
Primary Examiner
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